DOCUMENT RESUME

ED 450 250 CE 081 397

AUTHOR Grudens-Schuck, Nancy; Hargrove, Tasha M.
TITLE Indicators of Dependency in Participatory Extension Education.
PUB DATE 2000-11-27
NOTE 22p.; Paper presented at the Annual Meeting of the American Evaluation Association (Waikiki, Hawaii, November 2-4, 2000).
PUB TYPE Information Analyses (070) -- Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adult Basic Education; Classroom Environment; Community Development; Community Education; *Dependency (Personality); Developed Nations; Developing Nations; Evaluation Methods; Extension Agents; *Extension Education; Foreign Countries; Intergroup Relations; Models; *Participation; Partnerships in Education; Postsecondary Education; Self Help Programs; Student School Relationship; *Teacher Role; *Teacher Student Relationship; Teaching Methods
IDENTIFIERS Canada; Indonesia; *Interdependence; New Zealand; *Self Reliance

ABSTRACT

Participatory adult education programs assist individuals to substitute interdependent, mutually beneficial relationships for unrewarding, dependent relationships. Indicators of changes in dependency, however, are absent or imprecise in evaluations of participatory projects. A study explored facets of dependency by relating practitioners' activities in Canada (on experimental farm planning projects), Indonesia (on various government/village projects), and New Zealand (on natural resource management projects) to theoretical frameworks of dependency. A topology of models for dependency that vary with respect to four elements (origins of dependency; who defines dependency; who is responsible for changing dependency; and recommendations for countering dependency) is proposed. The models offer mandated self-reliance; phased self-reliance; and situated self-reliance. The concept of interdependence rather than dependency would enable more successful evaluation of social goals of participatory projects. Implications for evaluation include the following: (1) development of a conceptual model that features dependence and independence as polar extremes, with interdependence as a dynamic middle; (2) development of evaluations that assess quality of relationships rather than only evaluating changes in activities of program recipients; and (3) collaborative development of context-specific indicators for interdependency. (Contains 34 references.) (Author/KC)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 450 250

Indicators of Dependency in Participatory Extension Education

Nancy Grudens-Schuck and Tasha M. Hargrove

Paper presented at American Evaluation Association Annual Meeting

November 2-4, 2000, Waikiki, Hawaii

CONTACT INFORMATION

Nancy Grudens-Schuck, Ph.D.
Department of Agricultural Education and Studies
217 Curtiss Hall
Iowa State University
Ames, IA 50011
Phone: 515 294-0894
E-mail: ngs@iastate.edu

Tasha M. Hargrove, doctoral candidate
Department of Agricultural Education and Studies
Iowa State University
Ames, IA 50011
E-mail: thargrov@iastate.edu

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

N. Grudens-Schuck

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CE 051 397

2

BEST COPY AVAILABLE

Indicators of Dependency in Participatory Extension Education[1]

Nancy Grudens-Schuck[2] and Tasha M. Hargrove[3]
Iowa State University

ABSTRACT

Participatory adult education programs assist individuals to substitute interdependent, mutually beneficial relationships for unrewarding, dependent relationships. Indicators of changes in dependency, however, are absent or imprecise in evaluations of participatory projects. This paper explores facets of dependency by relating practitioners' activities in Canada, Indonesia, and New Zealand to theoretical frameworks of dependency. The paper proposes a topology of models for dependency that vary with respect to four elements: (a) origins of dependency, (b) who defines dependency, (c) who is responsible for changing dependency, and (d) recommendations for countering dependency. The paper argues that the concept of interdependence rather than dependency would enable more successful evaluation of social goals of participatory projects. Implications for evaluation include: (a) development of a conceptual model that features dependence and independence as polar extremes, with interdependence as a dynamic middle; (d) development of evaluations that assess quality of relationships rather than solely evaluating changes in activities of program recipients; and (c) collaborative development of context-specific indicators for interdependency.

INTRODUCTION

Participatory projects intend to catalyze self-reliance of participants in addition to meeting concrete project goals such as higher crop yields or improved diets. The opposite of self-reliance is dependency, portrayed as unwanted and something to stall or alleviate progress when it is present in groups (Bunch, 1995; Uphoff, 1992). Through research and reflections on personal experiences as facilitators of participatory projects, we know that facilitators regularly diagnose and monitor dependency, and actively counter dependent behaviors. Moreover, participatory educators gauge success of their projects partly on the extent to which people become less dependent on, for example, government, scientific experts, outside resources, or local tyrants. It is our observation, however, that evaluations of such projects rarely include practical, meaningful assessment of

---

[1] Paper presented at the annual conference of the American Evaluation Association, November 1-5, 2000, Honolulu, HI.
[2] Contact: Nancy Grudens-Schuck, Ph.D., Dept. of Agricultural Education and Studies, 217 Curtiss Hall, Iowa State University, Ames, IA 50010. E-mail: ngs@iastate.edu.

changes in dependency. We intend to use the opportunity of the American Evaluation Association annual meeting to gain feedback on a sketch of plausible consequences of the silence of evaluation on the topic of dependency, and on our proposal for framing ways in which "dependency assessments" could be improved in evaluations of real participatory programs.

Our concerns about dependency developed from experience with participatory projects in sustainable agriculture and natural resource management through extension and non governmental organizations. Rolling in and out of researcher and facilitator roles, we have worked in venues where dependency was an important concept, such as in projects to assist farmers to develop environmental farm plans, solve disease and weed problems in grazing systems, and work cooperatively with government to manage protected forests and endangered species. Common to all projects was the need to improve farmer-government relationships. Fundamental to the work we will discuss was an understanding that authentic participation of key stakeholders was essential to long-term success. The ideas presented in the paper are partly based on data, and partly on personal experience.

Our thinking progressed through conversations with each other about the development of our participatory projects, their ups and downs, funding woes and staff changes. To prepare for the conference, we read widely to clarify how different players (practitioners, adult educators, evaluators) think about dependency. Doing so, we confirmed that evaluation touched on the subject superficially, if at all, with the corollary that several evaluators are beginning to provide leadership in this area. We also read broadly across contexts because our individual projects were centered in very different worlds (three countries, different levels of development). In summary, our

---

[3] Contact: Tasha Hargrove, Dept. Agricultural Education and Studies, Curtiss Hall, Iowa State University, Ames, IA 50011. E-mail: thargrov@iastate.edu.

investigations confirmed that participatory educators talk freely about dependency and routinely do something about it, yet they assess changes in dependency informally and privately rather than systematically through evaluation.

DEPENDENCY FRAMEWORKS

Theoretical frameworks for dependency settle into three distinct huddles, or models. The models point to different strategies for evaluation of dependency and, by extension, capacity-building.

(1) mandated self-reliance

(2) phased self-reliance

(3) situated interdependence

Model 1: Mandated Self-Reliance

People working within the mandated self-reliance category offer powerful arguments for aggressively reducing dependent qualities of groups and individuals involved in agricultural development projects. Roland Bunch (1995) vividly portrays difficulties experienced by people living dependent lives in *Two Ears of Corn: A Guide to People-Centered Agricultural Improvement.* Bunch writes about dependency as a creature born of *'give-aways'* and *'doing things for'* people (author's italics). Bunch says,

> when the only progress villagers see is accompanied by *give-aways*, villagers can easily become convinced that they are incapable of making progress themselves.{Break} This feeling of inadequacy, in turn, creates dependency and subservience, robbing people of their self-respect. {Break} *Give-aways* can also blind people to the need of solving their own problems. . . and can also divert people's attention from the underlying demographic, institutional, or political problems. . . (p. 20). (author's italics)

For Bunch, dependency degrades both effectiveness and sustainability of projects, particularly for people who are greatly in need or very poor. Bunch's work focuses on projects in small, poor villages in Latin America with whom he worked as staff with World Neighbors, a non

governmental organization dedicated to local presence and self-reliance. Bunch's tenets populate most texts on participatory agricultural development (for example, Burkey, 1993; Grills, Bass, Brown, and Akers, 1996; Hall, 1977; Singh and Titi, 1995; Oakley and Marsden, 1984). Stan Burkey (1993), for example, adapted principals of successful participatory projects from Oakley and Marsden (1984): (1) involvement, (2) minimize dependence, (3) sustainability, (4) next steps, and (5) being effective as opposed to efficient. Burkey warns, "every effort must be made to minimize dependence of the activity, either in material or human terms, on assistance from outside, otherwise group autonomy will never be achieved" (p. 149).

A relentless commitment to self-reliance blossomed among international development workers (Hall, 1977), yet also found itself embraced by participatory facilitators in industrialized countries (Kaner, 1996). Andrew Campbell (1998), for example, relates his experience with participatory facilitation in the Landcare initiative in Australia.

> There is a fine line between helping a group to get themselves organized, and becoming pivotal in the achievement of the group to the point where if the facilitator leaves, the group fizzles out. Good facilitators tend to work themselves out of a job, withdrawing as groups become self-reliant. (p. 239)

Campbell's aspiration for facilitators to 'work themselves out of a job' is a story that cooperative extension staff in North America also tell each other when they talk about extension's organizational mission in the area of capacity-building (Wells, 1988). Catalyzing independence is crucial for success of collaborative and participatory extension initiatives when one applies mandated self-reliance thinking.

Model I is based on assumptions about the origins of dependency that influence who addresses dependency, and in what ways. Facilitators such as Kaner (1996) and Napier and Gershenfeld (1981), for example, write about dependency as a natural tendency of groups--a steady state to which people in cooperation with each other eventually return when a strong leader is present. Therefore, facilitators work firmly in the service of their group's self-sufficiency. It is the

program planner or facilitator's responsibility to guide groups toward independence and inter-cooperation. Kaner describes failure in this regard as "business-as-usual," a non-participatory approach.

> The operational value in a business-as-usual discussion is dependency on leadership, not shared responsibility. The person-in-charge is expected to run the meeting, monitor the progress of each topic, referee disputes, set ground rules, enforce time boundaries, and generally take full responsibility for all aspects of process management. (p. 28)

In this model, facilitators and program planners are responsible for diagnosing and countering dependency against a backdrop of presumed resistance to change among participants. One would assume, then, that educators would act as the best local resource for determining indicators of dependency, or would reach for universal indicators developed elsewhere. Kaner represents many when he suggests the following as a practical short-circuit of dependency.

> The most straightforward way to overcome a group's tendency to defer to the person-in-charge is to identify the tendency and educate the group. . . .ask people to discuss what they might say differently if the person-in-charge were not in the room. Everyone . . . will need the facilitator's respect and support. (p. 119)

Note that the facilitator guides the action that upsets formation of the dependent relationship. Vigilantly, the facilitator purposefully and skillfully works against the natural order of things.

Burkey (1993) describes this process in more dramatic terms, suggesting that if dependency raises its ugly head, the facilitator might react in a way that lets participants sink or swim. Burkey says,

> Assuming a successful integration during the middle phase, after a certain length of time a crisis will inevitably surface. It may take the shape of growing disagreements, confrontations and disputes between the change agents and the people (which may be a healthy sign), or of increasing submission and

> dependency of the people with respect to the project (which is definitely an unhealthy and undesirable sign). Whatever the alternative may be that this is the moment when it is imperative for the 'umbilical cord' to be severed. Beyond that point there is nothing positive that an outside agent could or should do. From there on, the chosen future and the chosen paths belong exclusively to the people. (p. 217)

Model 2: Phased Self-Reliance

Phased self-reliance explains the origins of dependency differently; however, the second model similarly endorses the idea of dependency as detrimental to people and projects. The point of departure between the first and second models is an emphasis on dependency as learnedshaped by institutional and cultural environments—in model 2. The distinction is fundamental, for what is learned can be unlearned. Development specialist Robert Chambers (1997) presents a well-documented and analytic portrait of dependency in this vein, emphasizing the ways in which oppressive institutions and systems, particularly colonialism, force people to act dependently. Over time, so the model goes, habits become internalized, leading us to see dependency as a quality of people rather than as a complex learned behavior.

Adult educator John Heron (1999) affirms Chambers' (1997) emphasis on environmental factors in the development of dependency from the viewpoint of social psychology. Heron traces the origins of dependency to individuals' early childhood experiences. Adult educator David Boud (1987), building on Jack Mezirow's transformation learning theory, also discusses dependency as a habit learned in childhood. According to Boud (1987), "Mezirow states that self-reflective learning is a process that focuses on 'gaining a clearer understanding of oneself by identifying dependency-producing psychological assumptions acquired earlier in life that have become dysfunctional in adulthood'. . . " (Mezirow quoted in Boud, p. 230). Heron also blames learners' long experience with educational systems "relatively short on autonomy and holism" as roadblocks to "freedom and integration" (p. 24).

Heron's work is interesting and, ultimately, useful for evaluators and program planners because his fine-grained and multifaceted theory of participatory facilitation frames dependency as something that moves around is not a fixed quality of any one program. Heron points out, for example, that learners may be dependent on the facilitator for program planning, but not for assessment. His work makes it harder to apply simplistic categories to programs, e.g., *this* program is participatory but *that one* is not.

Similar to the first model, facilitators and program planners are responsible for helping people to unlearn dependency in the phased self-reliance model. However, the educational project must take into consideration the degree to which people have internalized their desire for dependent relationships. Moreover, this second model recognizes that dependency is not a quality. Rather, dependency is learned behavior in a particular context, not assumed to be present in all facets of an individual's or group's life. Like model I, development of indicators for dependency would most likely come from facilitators who, through training and talent, possess greater knowledge of group dynamics and the local situation.

Model 3: Situated Interdependence

The third model challenges fundamental tenets of models one and two by critically analyzing the concept of dependency. Heron's (1999) work supports model two, but also supports a model of dependency that recasts dependency from an attribute of the individual or group to a concept that spotlights the quality of the relationship between two (or more) parties. Moreover, Heron features the concept of interdependency as an organizing theme. Heron's insistent use of new phrases in the following is awkward, but his affirmation of interdependence is clear.

> The values of self-determination and co-operation are importantly interdependent. There is no real co-operation going on unless it is between self-determining people; and self-determination is achieved and exercised in co-operative relations with others similarly engaged. . . nevertheless they do not coincide. . . . The

> values of up-hierarchy and down-hierarchy are likewise interdependent. There is no valid down-hierarchy, decision-making for others, unless up-hierarchy participation has authorized it; and up-hierarchy participation presupposes there is some valid down-hierarchy to participate in. (p. 320)

Again, Heron's use of the 'up hierarchy' and 'down hierarchy' phrases are hard to read, but they suggest movement in ways that the other frameworks do not. In other words, neither dependence nor independence is a healthy state, but represent polar opposites that prevent authentic participation when dominant. A balance or dynamism of dependence, independence, and interdependence among people is preferred.

The focus on relationships rather than inherent personal or group characteristics changes two other facets of the model. First, because relationships are defined and managed cooperatively, the relative dependence or independence of parties must be accounted for. Therefore, model three spotlights not just program participants (e.g., villagers and farmers), but the people on whom participants are supposedly dependent (e.g., experts, government, industry representatives). It is no surprise, then, that Heron (1999), alongside Jones (1973) and Napier and Gershenfeld (1981), present management of dependency as the responsibility of all program participants in cooperation with the facilitator and with each other.

Given Heron's (1999) predilection for honoring agency of stakeholders, it is reasonable to clarify actions he expects facilitator's to take. First, it is clear that Heron expects facilitators to be skilled, purposeful, emotionally balanced, and self-aware. However, Heron does not expect skills and personal qualities to suffice. Rather, Heron accepts that when agency is dispersed and even chaotic, so is control. Therefore, outcomes cannot be the sole responsibility of the facilitator; moreover, the facilitator should not act as if they are. The responsibilities and actions in model three are therefore necessarily shared. Heron's acknowledgment of the complexity of the issues parallels John Forester's writing on city and regional planners.

Forester (1999) attends to the complexity of practice by refusing to offer neat theories about how good practice will deliver uniformly good results. Such universal pronouncements are hogwash in the real world, suggest both Forester (1999) and Heron, undermining morale, democratic practice, and good sense.

Heron (1999) recommends acting ethically and purposefully, but contextualizes 'doing' and requires that we consider, like Forester's (1999) planners, that participatory educators "face a pressing and central challenge of making public deliberation work, making participatory planning a pragmatic reality instead of an empty ideal" (p. 3), "in a world in which rights are not self-implementing" (p. 6). Forester sees "deliberative processes as precarious and vulnerable achievements created on existing political stages" (p. 7). There is no steady, reliable locator for the right action when power and possibilities are unevenly distributed. Therefore, action, founded on imperfect information, is susceptible to new conditions and fluctuating interpretations that are owned by many players. Shared and continually updated indicators of interdependence developed in collaboration with others are therefore necessary (see also Fetterman, 1996; Greene, 1988; Guba and Lincoln, 1989).

Evaluation Issues

We know that participatory educators gauge success partly on the extent to which people become less dependent. We also know that facilitators judge privately on the basis of data informally gathered and analyzed. These facts present the extension evaluation community with a challenge because, as far as we can tell, evaluations of participatory projects fail to systematically track this crucial dimension. Given the importance of dependence (and independence) as a limitation of groups, imprecise evaluations of these dimensions are worrisome. Our concerns are both practical and philosophical. A practical concern is about lost opportunity, e.g., the relatively rare number of participatory projects that begin and end with systematic data collection restricts the

possibilities from learning about such programs, or improving them in the interim. In a Canadian study conducted by one of us, lack of evaluation of participatory educational strategies made a program vulnerable during a funding cycle because the value of participatory exercises used in farm planning workshops could not be established before the second grant-writing phase (Grudens-Schuck, 2000b; Grudens-Schuck, 1998).

A philosophical concern also arises when we consider the social role of evaluation: to articulate private judgments, and to submit those judgments to systematic public testing. Public testing is connected to the democratic idea that people who care about an issue have a right to information, are able to use information to make better decisions, and come to value and understand each other. Participatory education, intended to open dialogue and to push democracy to the fore, lacks accountability by these measures. Practitioners may be correct in their judgments about a group's development. Then again, they may be wrong. More likely, practitioners emphasize a view that is unilateral and partially self-serving rather than multifaceted or aggregated (Guba and Lincoln, 1989). Consequently, action is informed by a single view that emphasizes one set of values more than another (Greene, 1988). The concern arises in the aggregate, as patterns of systematic privileging and silencing occur, particularly of people from marginalized groups. The lack of public deliberation also violates professional evaluation standards that require that views of stakeholders be taken into consideration (Sanders, 1994).

Evaluation Practice

Philosophies, in turn, affect practice. This next section shares stories that illustrate why, as an extension evaluation community, we should wrestle with the issue of assessing dependency, working through the proposed models or making up new ones, to arrive at improved participatory practice. In this paper, we highlight practitioners' stories about their private evaluations of dependency among people in their complex, on-the-move projects in fishing and farming

communities. With Forester (1999), we argue that practitioners' actions are worth a close look because their work acts as a "bay window onto the wider world of democratic governance, participation, and practical decision making." Moreover, the commonplace concerns and activities of participatory educators "can teach us about the theory and practice of politics, public management, and the public-serving professions more generally" (pp. 2-3).

Several cases attempt to assess dependency and its close cousin, empowerment. Sandra de Carlo and José Drummond (1998) designed an assessment category called "empowers people and builds understanding" into a 19-indicator evaluation guide for a participatory development project in the Brazilian Amazon. Their criteria included positive criteria (i.e., "builds understanding beyond leaders of the tribe"), avoidance criteria (i.e., "does not break down existing community decision-making processes), and indicators focused on outcomes (i.e., "generated new insights about dealing with the outsider world") (pp. 75-76). David Cox (1998), working in the Philippines, writes about a "comprehensive poverty alleviation program" where "self-reliance" was a clear goal, "reflecting the focus on people in communities" (pp. 47, 57). Non governmental organizational staff, which in this project intended to "maximize self-reliance," worked under an assumption "geared to their eventual withdrawal" (p. 57).

Participatory Action Research in Indonesia

These stories also fit interview data from Grudens-Schuck's research project on evaluation of participatory projects in Nusa Tenggara, Indonesia. The projects were not Grudens-Schuck's own, but she had the opportunity to learn how leaders of a consortium that implemented longstanding participatory development projects thought about successive evaluations applied to their ten-year effort during a visit to the area in January 2000 (see Fisher, Moeliono and Wodicka, 1998; Wodicka, 1999). Prominent among indicators of success of a series of participatory projects was a decrease in dependency. I asked one facilitator, an Indonesian national contracted to work

with a non governmental organization, "How do you know when your participatory projects are going well?" He responded, describing interactions among villagers, non governmental staff, and government officials as they responded to his facilitation:

> I think at the same time that you are doing it, you are also observing. You have your own criteria. You see people participating. You see people interacting. You see people responding, thinking about things. You think it's going well. People are asking questions, people are taking initiative.

The above criteria are general, possibly applied to both villager and government officials. However, this facilitator also used specific criteria when he observed government officials. He said,

> You always see the nature of the interaction. We have training teams for our government officers. We see how they interact with villagers. Are they still bossy? Are they still the officers who go to the village to preach or to extend official government policy? Or do they get to the point they should—listen, more dialogue?

For villagers, there are also specific criteria, different from standards for government.

> The villagers are trained to respect officials coming to the village. So they show formal respect. That changes over time. Now they don't pay the formal respect. Like they can sit together, they can chat together. They can dialogue. They can critique the government. So the measure of their interaction changes. I think it is a good sign. The respect is not formal, but is more honest, more sincere. Genuine. So this is also a sign of success.

Moreover, unlike government officials, villagers scored points with this facilitator by disobeying his facilitation. He described preparations for a regional meeting, "We set numbers, like ten villagers per village. Ten will represent that village. Some villages send more. This is a good indication of interest." I asked, "Breaking the rules?" He affirmed, "Breaking the rules is good. It means they are interested. They are not only trying to fill the number." In this example, disobedience is a sign to the facilitator that villagers are using their own judgment, not relying on the facilitator, and acting outside the role of dependent learners by eschewing permission to bring more than the suggested number of people to the meeting. The criterion of disobedience, however, might be viewed

differently if it involved government people bringing more people to the meeting. Indicators for healthy activities by different players vary for facilitators, depending on the state of the relationship of concern. Overall, this vignette demonstrates principles of models one and two: mandated and phased self-reliance.

Our conversation also acknowledged the idea that evaluation criteria for dependence were left untracked, and untested, and that this was common. Our conversation went something like this:

Nancy: Do you keep track of those things?

Facilitator: I should keep track of notes, but I am not disciplined. If you just write it, you will always have it there. . . .

Nancy: None of us do. I wondered about that. I don't, either.

Environmental Farm Planning in Ontario, Canada

Grudens-Schuck (2000a, 2000b, 1998) spent three years working on a participatory evaluation and research project in Ontario, Canada, that investigated a participatory education program of environmental farm planning for farmers in the area. The farmer-extension partnership that crystallized this ambitious collaborative program was spearheaded by farm leaders' analysis that Ontario farmers were overly dependent on scientific experts, including extension, for assessment and development of action plans with respect to environmental farming. Participatory grassroots facilitators and extension staff who taught Environmental Farm Plan workshops frequently talked about countering dependency among farmers as part of their teaching commitment. Specifically, educators intended to reduce dependencies on "Cadillac solutions" and "the tried-and-true, expensive way of doing things" through application of farmers' practical, local knowledge (Grudens-Schuck, 2000b). Although pushing farmers to assume greater responsibility for environmental farming, the program also provided a modest financial incentive. Their logic for providing the incentive was partly based upon their belief that farmers were accustomed to

government grant program, and would need a transition program prior to assuming full costs for environmental improvement. Also, politically, farm leaders pushed the idea that financial incentives discouraged under Bunch's logic of mandated self-reliance—would press the issue of society's responsibility for sharing costs of environmental improvement (Grudens-Schuck, 2000a).

Farm leaders who catalyzed this "farmer-driven, farmer-led" program worked within the second framework, phased self-reliance, which was not just tempered by the assumption that life-long habits take time to change, but also based on the idea that negotiation with society over cost-recovery was a long-term project with many unknowns.

Grassroots Facilitation in New Zealand

My evaluation colleagues in New Zealand, Will Allen and Margaret Kilvington, told me a story that swings the issues to the third model, situated interdependence. In a government agency-sponsored participatory natural resource management project with farmers, an agency facilitator had been hired to keep farmers organized and energized, assisting with logistics and the group process (see Allen et al., 2000; Kilvington et al., 1999; Oliver et al., 2000). As planned, the grassroots facilitator was phased out to encourage the groups to be more self-reliant and develop the capacity to deal with the resource management issues within the community. Facilitation support was still made available by the agency, but only to those groups sufficiently motivated and organized to seek it out and utilize it. However, farmers fussed about the change, claiming that government officials did not play a sufficiently strong role in assisting farmer collaborations. Determined to keep the initiatives alive, farmers and program staff put their heads together about the value of the facilitator, concluding that reliance on a purposeful outside facilitator was necessary. Soon, a more grassroots facilitator was employed to serve both farmers and agency.

In this case, deliberative, public evaluation changed the outcome. Rather than assume a 'sink or swim' approach as Burkey did earlier in the paper, Allen and Kilvington's experience departed

from a participatory ethos that would force self-reliance. Bunch states directly, "*anything* that we do that the people can do for themselves is paternalistic {italics original} (p. 23) and, later, "*Giving things to* people and *doing things for* people cannot be called development. {italics original}(p. 28). Allen and Kilvington's experience may well contradict Bunch's claim, a consequence of a more open evaluation process. One of the benefits of this action was to retain dependence and connection of government to farmers, lessening the independence of a scientific-technical institution.

NEW LEARNING

Rather than presenting 'findings,' we present what we learned about the issues of dependency that helps us think differently about evaluation of participatory education. We present our learning as implications for evaluation theory and practice.

First, we affirm the idea that evaluation of the social indicator of dependency is usefully reframed as a set of poles (dependence and independence), neither of which is healthy when it dominates an individual or group's actions. Between the poles is a fluctuating middle, interdependence, which maintains it forays into independence and dependence not as errors, but as necessary and natural dynamism. Moreover, any discussion of these characteristics must be in relation to specific parties, under particular circumstances. We reject the idea that people can be reified as dependent or independent. Instead, it is more useful as program planners and evaluators to assess the extent to which people are dependent or independent of each other with respect to a particular aspect of their lives, such as natural resource management, or perhaps as neighbors or co-workers.

This concept of dependence as relational has implications for evaluation design. Evaluation informed by these models should assess behaviors and beliefs across parties, not just among targeted program recipients. The most comprehensive work of this type is found in Ellen Taylor-Powell and associates (1998) guide to evaluating "collaboratives," a project type that necessarily

shares many of the same assumptions as participatory education. In their work, stakeholders assess equally the extent to which they feel connected to each other, share mission, and find their ideas sincerely considered by others involved in the joint venture. Prudence Brown (1999) also addresses the role of the evaluator in deciding indicators for community initiatives, again a close relative to participatory facilitation. These summaries provide guidance for constructing forms of evaluation that remain situated, yet resonate with participatory projects in other contexts.

CONCLUSION

Because this paper is written to stimulate thoughtful consideration by extension evaluators and others working with participatory education projects, we do not present a formal conclusion. Instead, we offer concluding questions. The first relates to our preference for model three juxtaposed with our awareness that some projects (i.e., the Indonensian case, and the Ontario case) fall more into model one or two. Allen and Kilvington may progress on this conundrum through their insightful use of the work of Petty and Frank, who suggest that the stage of dependence, independence, or interdependence at which different groups begin a project directs the sorts of analyses that apply (Petty and Frank in Allen et al., 2000). We concur, and look forward to more discussions about evaluation processes (and program planning) that make use of analysis of a group's social development as well as technical development 'readiness.'

A second set of considerations relates to control over development of the indicators. Allen (2000) and Kilvington's (1999) work emphasizes participatory development of indicators, and shared interpretation, a type of participatory evaluation (Greene, 1988). A participatory approach to evaluation would seem to enhance self-reliance and interdependence while arriving at indicators specific to the situation. This process could potentially weaken, however, a model one or two approach to participatory development.

There is a third set of considerations. These considerations are presented rather starkly by Crewe and Harrison (1998), who deny that the word dependency has validity in the first place. They paint dependency as a concept pushed onto projects by colonizers to reify a concept that serves dominant interests. Although we are not like-minded, Crewe and Harrison remind us that a political analysis of the ways in which extension and non governmental staff educators promote self-reliance is necessary and should not be avoided (but usually is). For example, which parties benefit from a radical restructuring of dependent relationships? In an era of program and government budget cuts in which supposedly strategic positioning of participatory projects have found a niche, to what extent does decreasing dependence justify an aggressive push for people to stand on their own feet because professionals can no longer support them fiscally or organizationally? This paper acknowledges the underbelly of devolution, and its embrace of participatory efforts that decentralize responsibility but not resources.

Forester (1999) holds on to the good of participatory initiatives in a way that accounts for unhealthy corrosion of the concepts of participation, echoed by Crewe and Harrison (1998). However, the optimism we share with him does not give us leave to ignore cynical renderings of participation in projects we evaluate. This is why evaluation might be helpful in particular. Instead of leaving its full consideration private and untested, systematic evaluations help the muddle of ideas about dependency in participatory education to see the light of day.

ACKNOWLEGMENTS

The ideas in this paper rose to the surface during conversations in January 2000 in Indonesia during a trip hosted by Stefan Wodicka, World Neighbors, and Larry Fisher, Cornell Center for the Environment, supported by a travel grant from Iowa State University College of Agriculture. The dependency discussion was stimulated most directly by Ilya Moeliono, graduate student at Cornell University, while visiting his research sites on Flores, Nusa Tenggara, Indonesia. Discussions progressed during a visit by Will Allen, New Zealand, to Iowa State University in March 2000, supported by Miller Lectureship funds and a College of Agriculture visiting scholar grant. Allen and his colleague, Margaret Kilvington, continued discussions regarding the importance of dependency in their work in New Zealand with Grudens-Schuck via e-mail, including reviewing and

contributing directly to the ideas in this paper. Thanks also to Iowa State reviewers Mona Othman, Juli Cramer, and Dan Cramer for timely constructive critique of the presentation.

REFERENCES

Allen, W., Bosch, O., Kilvington, M., Oliver, J. & Gilbert (2000). Benefits of collaborative learning for environmental management: Applying Integrated Systems for Knowledge Management approach to support animal pest control. Journal of Environmental Management (in press).

Boud, D. (1987). A facilitator's view of adult learning. In D. Boud and V. Griffin (Eds.) Appreciating adult learning from the learners' perspective (pp. 222-239). London: Kogan Page.

Brown, P. (1999). The role of the evaluator in comprehensive community initiatives. In J.P. Connell, A.C. Kubisch, L. B. Schnorr, & C. Weiss, New approaches to evaluating community initiatives (Volume 1: Concepts, methods and contexts). Washington, DC: Aspen Institute.

Bunch, R. (1995). Two ears of corn: A guide to people-centered agricultural improvement (2nd edition). Oklahoma City, OK: World Neighbors.

Burkey, S. (1993). People first: A guide to self-reliant, participatory rural development. New Jersey: Zed Books.

Campbell, A. (1998). Fomenting synergy: Experiences with facilitating Landcare in Australia. In N.G. Roling & M.A.E. Wagemakers (Eds.), Facilitating sustainable agriculture (pp. 232-249). Cambridge, UK: Cambridge University Press.

Chambers, R. (1997). Whose reality counts? Putting the first last. London: Intermediate Technology Publications.

Cox, D. R. (1998). Community rebuilding in the Phillippines: A poverty alleviation program in Negros Occidental, 1990-1995. In M. D. Hoff (Ed.) Sustainable community development: Studies in economic, environmental, and cultural revitalization (pp. 45-62). Boca Raton, FL: Lewis Publishers.

de Carlo, S. & Drummond, J. (1998). The Yawanawa-Aveda Bixa Project: A business partnership seeking sustainability in an Amazonian indigenous community. In M.D. Hoff (Ed.), Sustainable community development: Studies in economic, environmental, and cultural revitalization, (pp. 63-84). Boca Raton, FL: Lewis Publishers.

Crewe, E. & Harrison, E. (1998). Whose development? An ethnography of aid. London: Zed Books.

Fetterman, D. (1996). Empowerment evaluation: An introduction to theory and practice. In D.M. Fetterman, S. J. Kaftarian, and A. Wandersman (Eds.), Empowerment evaluation: Knowledge and tools for self-assessment and accountability (pp. 3-46). Thousand Oaks, CA: Sage.

Fisher, L., Moeliono, I. & Wodicka, S. (1998, May). Cattle, cockatoos, chameleons, and ninja turtles: Seeking sustainability in forest mangement and conservation in Nusa Tenggara, Indonesia. Paper presented to the World Bank/Ford/IDRC International Workshop on Community-Based Natural Resource Management, Washington, DC.

Forester, J. (1999). The deliberative practitioner: Encouraging participatory planning processes. Cambridge, MA: MIT Press.

Greene, J.C. (1988). Stakeholder participation and utilization in program evaluation. Evaluation Review, 12(2), 96-116.

Grills, C., Bass, K., Brown, D. & Akers, A. (1996). Empowerment evaluation: Building upon a tradition of activism in the African American community. In D. M. Fetterman, S. J. Kaftarian, and A. Wandersman (Eds.), Empowerment evaluation: Knowledge and tools for self-assessment and accountability, (pp. 123-140). Thousand Oaks, CA: Sage.

Grudens-Schuck, N. (2000a). Conflict and engagement: An empirical study of a farmer-extension partnership in a sustainable agriculture program. *Journal of Agricultural and Environmental Ethics 13* (1), 79-100.

Grudens-Schuck, N. (2000b, June). Extension and grassroots facilitators' approaches to participatory education: Interrelationships among training, worldview and institutional support. Paper presented at the Adult Education Research Conference, Vancouver, BC, Canada.

Grudens-Schuck, N. (1998). When farmers design curriculum: Participatory education for sustainable agriculture in Ontario, Canada. Unpublished doctoral dissertation, Cornell University, Ithaca.

Grudens-Schuck, N. & Hill, D. (1997, June). Democratic action and participatory research in an environmental education program for farmers in Canada: Farmers' local knowledge. Paper presented at the World Congress 4/8 Convergence (4th on Action Research, Action Learning, and Process Management and 8th on Participatory Action Research), Cartagena, Colombia.

Guba, E.G. & Lincoln, Y.S. (1989). Fourth generation evaluation. Newbury Park, CA: Sage.

Hall, B.L. (1977). Creating knowledge: Breaking the monopoly. Toronto: Participatory Research Group, International Council for Adult Education.

Heron, J. (1999). The complete facilitator's guidebook. London: Kogan Page.

Jones, J. E. (1973). Dependency and intimacy. In J.E. Jones and J. W. Pfeiffer (Eds.), The 1973 annual handbook for group facilitators (pp. 132-134). Iowa City, IA: University Associates.

Kaner, S. (1996). Facilitator's guide to participatory decision-making. Gabriola Island, BC: New Society Publishers.

Kilvington, M., Allen, W. & Kravchenko, C. (1999) Improving farmer motivation within Tb vector control. Unpublished Landcare Research Contract. Report LC9899/110, Lincoln, New Zealand.

Napier, R. & Gershenfeld, M. (1981). Groups: Theory and experience. (2nd edition). Boston: Houghton Mifflin Company.

Oakley, P. & Marsden, D. (1984). Approaches to participation in rural development. Geneva: ILO.

Oliver, J., Allen, W., Kilvington, M. & Gilbert, M. (2000, August). The role of the Animal Health Board's locally initiated programmes in changing farmer attitudes. Proceedings, 2000 Conference, Achieving change through improved knowledge systems (p. 343-349).Palmerston North: Massey University.

Sanders, J.R. (1994). The program evaluation standards (2nd ed.). Thousand Oaks, CA: Sage.

Singh, N. & Titi, V. (1995). (Eds). Empowerment: Towards sustainable development. London: Zed Books.

Taylor-Powell, E., Rossing, B. & Geran, J. (1998). Evaluating collaboratives: Reaching the potential. Madison, WI: University of Wisconsin-Extension.

Uphoff, N. (1992). Learning from Gal Oya. Ithaca, NY: Cornell University Press.

Wells, B.L. (1988). Working with groups and organizations (Module 5), in E.J. Boone (Ed.), Working with our publics: in-service education for Cooperative Extension. Raleigh, NC: North Carolina Agricultural Extension Service.

Wodicka, S. (1999). Report on workshop to discuss preliminary evaluation findings on the impact of the NTCDC 1991-1999. World Neighbors, South East Asia Regional Office, Ubud, Bali, Indonesia.